

ABSTRACT OF THE DISCLOSURE

Respirable particles carrying active principles or diagnostics in nanoparticle form are created by mixing the nanoparticles with liquid carrier, then forming the resultant mixture into respirable particles. Spray-drying, freeze spray drying and drying followed by comminution may be used to create the respirable particles, which may be delivered to the lung via a dry powder inhaler. In one example, lactose was used as the excipient and spray-dried with two different types of nanoparticle: gelatin and poly butylcyanoacrylate nanoparticles. The incorporation of nanoparticles did not affect the respirable fraction of the carrier powders.